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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/868,139	09/19/2001	Jeffrey Wilson Thornton	019219-008	6889

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EXAMINER	
YOON, TAE H	

ART UNIT	PAPER NUMBER
1714	7

DATE MAILED: 06/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)
09/868,139	Thornton et al
Examiner	**Group Art Unit**
T. Yoon	1714

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

☒ Responsive to communication(s) filed on 9-19-01, Pre. Amdt.

☐ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle,* 1935 C.D. 1 1; 453 O.G. 213.

Disposition of Claims

☒ Claim(s) 1-15 is/are pending in the application.

Of the above claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-8 and 10-15 is/are rejected.

☒ Claim(s) 9 is/are objected to.

☐ Claim(s) _____ are subject to restriction or election requirement

Application Papers

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)–(d)

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)–(d).

☐ All ☐ Some* ☐ None of the:

☐ Certified copies of the priority documents have been received.

☐ Certified copies of the priority documents have been received in Application No. _____ .

☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____ .

Attachment(s)

☒ Information Disclosure Statement(s), PTO–1449, Paper No(s). _____

☒ Notice of Reference(s) Cited, PTO–892

☐ Notice of Draftsperson's Patent Drawing Review, PTO–948

☐ Interview Summary, PTO–413

☐ Notice of Informal Patent Application, PTO–152

☐ Other _____

Office Action Summary

The submitted prior art, US Pat. 4,371,208, is puzzling since it is related to a dump truck.

Insertion of the continuing data at the beginning of the specification is suggested.

The recited "especially ---" in claims 3 and 5, "preferably ---" in claim 8 and "such as glycerol" in claim 9 are objected and separate claims containing said narrower limitations are suggested. The recited "obtainable" in line 1 of claim 13 is objected, and "obtained" is suggested.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recited "the acidified polysaccharide gel" is confusing and lacks an antecedent basis since the recited steps do not require "in sequence" and since (b) can be the first step. Thus, crosslinking of acidic groups of (a) with a basic crosslinker would not yield said "the acidified polysaccharide gel" (said acidic groups are crosslinked and neutralized).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) 1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a); or

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 4, 10, 13 and 15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Malson (US 4,963,666).

Malson teaches crosslinked carboxyl-containing polysaccharides with a pH of 3-5 at col. 2, lines 33-62. Dried particles are taught at col. 3, lines 24-37. The dried films taught at col. 4, lines 5-39 meet the instant article. Also, an invention in a product-by-process claim is a product, not a process. See ***In re Brown***, 459 F2d 531, 173 USPQ 685 (CCPA 1972) and ***In re Thorpe***, 777 F2d 695, 697, 227 USPQ 964 (Fed. Cir. 1985). Since the PTO does not have equipments to conduct the test, it is fair to require applicant to shoulder the burden of proving that his

crosslinked carboxyl-containing polysaccharides differ from those of Malson. ***In re Best***, 195 USPQ 430,433 (CCPA 1977).

With respect to the process steps, the recited "comprising the steps of ----" of claim 1 does not require sequential steps. Malson teaches a process of obtaining dried particle by spray drying of the solution at col. 3, lines 24-37 which meets the instant steps c and d. Also, spray drying tower meets the fluidised bed. The instantly recited steps a, c and d can be done simultaneously after the step c.

Thus, the instant invention lacks novelty.

Claims 13-15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over EP 0 202 127.

EP teaches disposable diapers comprising superabsorbent hydrogels and a pH control agent in examples I and II. Said composition maintains skin pH within the range of from 3.0 to 5.5 in the presence of urine and feces (claim 1). Thus, said pH would be lower in the absence of urine and feces which meets the instantly recited " pH below 5". Various hydrogels such as carbox-methylcellulose and acrylic acid grafted starch are taught at page 7, and said hydrogels are inherently crosslinked. An invention in a product-by-process claim is a product, not a process. See ***In re Brown***, 459 F2d 531, 173 USPQ 685 (CCPA 1972), ***In re Thorpe***, 777 F2d 695, 697, 227 USPQ 964 (Fed. Cir. 1985) and ***In re Best***, 195 USPQ 430,433 (CCPA 1977).

Thus, the instant invention lacks novelty.

Claims 13-15 are rejected under 35 U.S.C. 103(a) as obvious over EP 0 202 127 and Assarsson et al (US 3,901,236).

EP refers said hydrogels to US Patent 3,901,236 at page 7, lines 27-28, and said US Patent 3,901,236 teaches chemically crosslinked hydrogels at col. 5, line 59 to col. 6, line 50.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to utilize chemically crosslinked hydrogels in EP with teaching of Assarsson et al since EP teaches Assarsson et al.

Claims 1-7 and 10 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Besemer et al (US 6,331,619 or WO 98/27117).

US and WO are same and thus the examiner points out WO.

The instant step b can be the first step. WO teaches the instant process in examples 1 and 3. Said example 1 meets the instant step b and claims 2 and 3, and said example 3 meets the instant steps a, c and d and an acidification in claim 7. Carboxymetylation and 6-carboxyl polysaccharide (starch) (page 2, lines 21 to page 3, line 4), the instant carboxyl groups per monosaccharide (claim 1) and crosslinkers such as diepoxybutane (page 5, line 3) are taught. Spray-drying is taught at page 5, line 29, and spray drying tower meets the instant fluidised bed.

Thus, the instant invention lacks novelty.

Claims 1-8 and 10-12 are under 35 U.S.C. 103(a) as obvious over Besemer et al (US 6,331,619 or WO 98/27117).

The instant invention further recites crosslinking at temperature of at least 100°C and additional heating and crosslinking. Howeve, WO teaches crosslinking and the use of any drying technique at page 5, lines 14-30.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to utilize the instant temperature such as 100°C for drying in Besemer et al since a higher temperature would yield a faster drying and since Besemer et al teach the use of any drying technique. Said drying at 100°C would meets the instant claims 11 and 12 absent any duration of each step.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground

provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-8 and 10-12 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 5-16 of U.S. Patent No. 6,331,619. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant process steps are disclosed in said patent as discussed above and since the patented claims permit the presence additonal steps in order to obtain a superabsorbent polysaccharide derivative which is obviously in a form of powders or granules.

Claims 1-8 and 10-15 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-17 of U.S. Patent No. 6,331,619 in view of EP 0 202 127. The instant claim further recites a pH below 5 for a superabsorbent polysaccharide derivative and an article thereof. However, said superabsorbent polysaccharide derivative and an article with a pH below 6 which prevents skin rash are well known as taught by EP, page 2, lines 1-21. Thus, it would be obvious to one skilled in the art to utilize a superabsorbent polysaccharide derivative and an article having a pH below 5 in U.S. Patent No. 6,331,619 by teaching of said EP.

Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Note objections at the beginning of the office action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ning et al (US 5,247,072) teach a process of obtaining dried particle by the heat-treating process or freeze drying at col. 5, lines 54-56 and col. 6, lines 60-64. Ning et al (US 5,247,072) teach the solution pH of about 5.0 to about 11.0 at col. 5, lines 17-19, but fail to teach or suggest the use of a crosslinking agent to form a gel. Hodge (US 4,657,080) teaches a composition having a pH of less than 5 comprising a crosslinkable polymer such as CMC and a crosslinker such as hydroxycarboxylic acid in examples, but does not teach the instant drying method.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H. Yoon whose telephone number is (703) 308-2389. The examiner can normally be reached on Monday to Thursday from 8:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on (703) 306-2777. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

THY/June 13, 2003

TAE H. YOON
PRIMARY EXAMINER